CLM PTO NLN 7/12/01

8. (NEW) A system comprising two endpoints (1, 2) communicating with each other by means of a packet-switched network,

said endpoints (1, 2) being adapted to estimate jitter from packet arrival times and to modify silence period lengths according to the latest estimate by using adaptation algorithms,

wherein

said endpoints (1, 2) are adapted to measure a response time (ρ) of the system at a given time instant, the response time being defined as the time elapsed between the capture of a given frame of speech at one endpoint and its playout at the other endpoint plus the same quantity in the other direction, and to use the response time as a parameter in the adaptation algorithms.

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9. (NEW) The system according to claim 8, wherein said endpoints are adapted to verify that for certain adaptation points the playout (ρ) of a packet can be expressed as $\rho = r + B$, where r is a packet reception time and B is a buffer delay chosen by using the algorithms, and to synchronize the playout for other packets with the previous packet playout.

10. (NEW) The system according to claim 8, wherein said endpoints (1, 2) are adapted to use different ones of said adaptation algorithms.

11. (NEW) A method of using adaptation algorithms for estimating jitter from packet arrival times and for modifying silence period lengths according to the latest estimate, in communications between two endpoints in a packet-switched network system, said method having the steps of:

measuring a response time (ρ) of the system at a given time instant, the response time being defined as the time elapsed between the capture of a given frame of speech at one endpoint and its playout at the other endpoint plus the same quantity in the other direction, the measuring comprising the steps of:

sending (S1) a response time request packet from a first endpoint (1) to a second endpoint (2) at a time s_i;

receiving (S2) the response time request packet at said second endpoint (2) at a time r_i;

sending (S4) a response time indication packet from said second endpoint (2) to said first endpoint (1) at a time s_i;

receiving (S5) the response time indication packet at said first endpoint (1) at a time r_i; and

computing (S6) the response time (ρ) on the basis of the sending and receiving times in said first endpoint (1); and

using the response time as a parameter in the adaptation algorithms.

12. (NEW) The method according to claim 11, wherein the response time request packet sent from said first endpoint (1) includes information identifying one of the packets which has been sent at a time s' by said second endpoint (2) and received at a time r' by said first endpoint (1) since its latest adaptation, and wherein the response time indication packet sent from said second endpoint (2) includes information identifying one of the packets which has been sent at a time s by said first endpoint (1) and received at a time r by said second endpoint (2) since its latest adaptation.

13. (NEW) The method according to claim 12, wherein $s'-s_i$ is computed in said second endpoint (2) (S3) and the result is indicated in the response time indication packet.

14. (NEW) The method according to claim 13, wherein in said calculating step the response time (ρ) is calculated according to the following expression:

$$\rho = (r-r_i)+(s-s_i)+(r'-r_i)+(s'-s_i)+(T_r+T_i)+D_E+D_P+D'_E+D'_P$$

wherein

D_E and D'_E are encoding delays of the first and second endpoints, respectively,

D'_P and D_P are adaptation playout delays of the first and second endpoints, respectively, and

$T_r=r_r-s_r$ and $T_i=r_i-s_i$, and

wherein

the quantities of D_E, D'_P, T_r+T_i, $r'-r_i$ and $s-s_i$ are known or can be computed in said first endpoint (1) and the quantities of D'_E, D_P, $r-r_r$ and $s'-s_i$ are indicated in the response time indication packet.

CLAIMS 1-7 CANCELLED.